

COURSE INFORMATION SHEET
FALL 2007

- Course:** PURE MATHEMATICS 431 - Groups, Rings and Fields
Lecture/Time: L01 MWF 10:00
Instructor: W. Keith Nicholson
Office/Phone/Email: MS 314 220-3954 wknichol@ucalgary.ca
- Prerequisites:** Mathematics 311 and Pure Mathematics 315; or consent of the department.
NOTE: The Faculty of Science policy on pre- and co-requisite checking is outlined in the current University Calendar (see www.ucalgary.ca/pubs/calendar) *Faculty of Science, section 5C*. **It is the students' responsibility to ensure that they have the pre- and co-requisites for the course, and if they do not they will be withdrawn from the course without notice.**
- Fee policy:** After the last day to drop/add courses, there will be no refund of tuition fees if a student withdraws from a course, courses or the session.
- Academic Accommodations:** It is the student's responsibility to request academic accommodations. A student with a documented disability who may require academic accommodation must register with the Disability Resource Centre to be eligible for formal academic accommodation. DRC registered students are required to discuss their needs with the instructor no later than fourteen (14) days after the start of this course.
- The University policy on grading and related matters** is described in the current University Calendar, *Academic Standings*. In determining the overall grade in the course, the following weights will be used:

<i>Assignments</i>	[5]	30%
<i>Midterm Test</i>	[1]	35%
<i>Final Exam</i>		35%

There will be a final examination scheduled by the Registrar's Office. *** The use of aids such as open book, etc. **is not** permitted.
- Missed Components of Term Work.** The regulations of the Faculty of Science pertaining to this matter are outlined in the current University Calendar, *Faculty of Science, section 6A*. It is the student's responsibility to familiarize herself/himself with these regulations.
- Academic misconduct** (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the current University Calendar. See: <http://www.ucalgary.ca/honesty/>
- Dates and times of class exercises held outside of class hours (evening tests, Saturday laboratory examinations, weekend field trips, etc.):**

There will be a two-hour midterm test scheduled out of class time: details TBA

REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME ACTIVITY. If you have a conflict with this out of class time activity, please inform your instructor at least one week in advance of the activity so that other arrangements may be made for you.

PMAT 431

GROUPS, RINGS and FIELDS

FALL 2007

TEXT: *Introduction to Abstract Algebra, 3rd Edition* by W. Keith Nicholson, Wiley, 2007.

GRADING: The final grade will be based on the following:

Assignments: 30% **Midterm Exam:** 35% **Final Exam :** 35%

MIDTERM: 2 hours, **TBA**; 35% of the final grade.

FINAL EXAMINATION: 3-hours (scheduled by the Registrar), 35% of the final grade.

LECTURES: Mondays, Wednesdays and Fridays at 10:00.

TUTORIALS: Thursdays at 10:00.

ASSIGNMENTS. There will be 5 assignments, each worth 6% of the final grade.

LECTURE SCHEDULE: Here is an approximate outline of the contents of the course. Knowledge of Chapters 0,1, 2, 3 and 4 is assumed (except for 1.5, 2.11, 3.5, 4.4, 4.5 and 4.6), although some review will be given as the material is encountered. Chapters 6 and 10 are pretty much independent of the rest, so the exams are structured as follows:

Midterm Exam: Covers Chapters 5, 7, 8 and 9—Factorization and Groups.

Final Exam: Covers Chapters 6 and 10—Fields.

WEEK	MATERIAL	COMMENTS
Sep 10-14	Review, 5.1, 5.1	Lectures begin Monday September 10
Sep 17-21	5.2, 7.1, 7.1	
Sep 24-28	7.2, 7.2, 8.1	
Oct 1-5	8.1, 8.2, 8.2	
Oct 8-12	__, 8.3, 8.3	Thanksgiving: Monday October 8
Oct 15-19	8.4, 8.4, 9.1	
Oct 22-26	9.1, 9.2, 9.2	
Oct 29-Nov 2	9.3, 9.3, 4.3	
Nov 5-9	6.2, 6.2, 6.3	Midterm: TBA
Nov 12-16	__, 6.3, 6.3	Reading Days: November 10-13
Nov 19-23	6.4, 6.4, 10.1	
Nov 26-30	10.1, 10.1, 10.2	
Dec 3-7	10.2, 10.2, 10.3	Lectures end Friday December 7
Dec 10-19		Exams